

AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Currently Amended) The system of Claim ~~[[1]]~~3, wherein the signal comprises at least one of data and power, the signal being selected from a group comprising acoustic, electric, electromagnetic or optic signals.

3. (Currently Amended) ~~The system of Claim 2A combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:~~

a lower sub-telemetry system, the lower sub-telemetry system coupled at one end to a sensor,

an upper sub-telemetry system, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter; and, further comprising

a signal converter coupled between the upper sub-telemetry system and the lower sub-telemetry system for converting one type of signal communicated through at least one of the lower sub-telemetry system and the upper sub-telemetry system to another type of signal communicated through at least one of the upper sub-telemetry system and the lower sub-telemetry system.

4. (Currently Amended) The system of Claim ~~[[1]]~~3, wherein the one end of the lower sub-telemetry system defines a first axial position in the wellbore and the another end of the lower sub-telemetry system defines a second axial position in the wellbore, the signal being communicated between the first axial position and the second axial position.

5. (Previously presented) The system of Claim 4, wherein the one end of the upper sub-telemetry system defines a third axial position in the wellbore and the

another end of the upper sub-telemetry system defines a fourth axial position in the wellbore, the signal being communicated between the first axial position, the second axial position, the third axial position and the fourth axial position.

6. (Currently Amended) The system of Claim ~~[[1]]~~3, wherein the lower sub-telemetry system is selected from a group comprising drill pipe, casing, mud, cable, hardwire drill pipe, hardwire casing or fiber optic cable, and the upper sub-telemetry is selected from a group comprising drill pipe, casing, mud, cable, hardwire drill pipe, hardwire casing or fiber optic cable.

7. (Cancelled)

8. (Currently Amended) The system of Claim 7A combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system comprising cable, the lower sub-telemetry system coupled at one end to a sensor;

an upper sub-telemetry system comprising hardwire drill pipe, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter; and, further comprising

a hanging sub for coupling the lower sub-telemetry system to the upper sub-telemetry system, the hanging sub and the hardwire drill pipe using at least one of inductive coupling and capacitive coupling to communicate the signal between the lower sub-telemetry system and the upper sub-telemetry system.

9. (Cancelled)

10. (Currently Amended) The system of Claim 9A combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system comprising hardwire drill pipe, the lower sub-telemetry system coupled at one end to a sensor;

an upper sub-telemetry system comprising cable, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter;
and, further comprising

a hanging sub for coupling the lower sub-telemetry system to the upper sub-telemetry system, the hanging sub and the hardwire drill pipe using at least one of inductive coupling and capacitive coupling to communicate the signal between the lower sub-telemetry system and the upper sub-telemetry system.

11. (Currently Amended) ~~The system of Claim 6A~~ combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system, the lower sub-telemetry system coupled at one end to a sensor; and

an upper sub-telemetry system, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter, wherein the lower sub-telemetry system comprises cable and the upper sub-telemetry system comprises hardwire casing and a casing shoe, the casing shoe at least partially surrounding the hardwire casing at the one end of the upper sub-telemetry system.

12. (Previously presented) The system of Claim 11, further comprising a hanging sub for coupling the lower sub-telemetry system to the upper sub-telemetry system, the hanging sub and the casing shoe each comprising a power source and at least one of a transmitter and a receiver for communicating the signal between the lower sub-telemetry system and the upper sub-telemetry system.

13. (Currently Amended) The system of Claim 6A combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system, the lower sub-telemetry system coupled at one end to a sensor; and

an upper sub-telemetry system, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter, wherein the lower sub-telemetry system comprises hardwire drill pipe and the upper sub-telemetry system comprises hardwire casing and a casing shoe, the casing shoe at least partially surrounding the hardwire casing at the one end of the upper sub-telemetry system.

14. (Previously presented) The system of Claim 13, wherein the hardwire drill pipe and the casing shoe each comprise a power source and at least one of a transmitter and receiver for communicating the signal between the lower sub-telemetry system and the upper sub-telemetry system, the power source and the at least one of the transmitter and the receiver for the hardwire drill pipe positioned at the another end of the lower sub-telemetry system.

15. (Currently Amended) The system of Claim [[1]]3, wherein the sensor communicates the signal from at least one of the wellbore and the lower sub-telemetry system to at least one of the lower sub-telemetry system and at least one of a drill bit and a motor coupled to the sensor.

16. (Currently Amended) The system of Claim [[1]]3, wherein the signal receiver receives the signal from at least one of the upper sub-telemetry system and the signal transmitter.

17. (Previously presented) The system of Claim 16, wherein the signal transmitter transmits the signal from at least one of a surface of the wellbore and the signal receiver to at least one of the surface of the wellbore and the signal receiver.

18. (Currently Amended) A combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system;

an upper sub-telemetry system; and

a middle sub-telemetry system for coupling the lower sub-telemetry system to the upper sub-telemetry system; and

converters between the sub-telemetry systems for relaying signals from one sub-telemetry system to another.

19. (Previously presented) The system of Claim 18, wherein the middle sub-telemetry system comprises multiple sub sub-telemetry systems.

20-31 (Cancelled)

32. (Currently Amended) ~~The system of Claim 1A~~ a combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system, the lower sub-telemetry system coupled at one end to a sensor; and

an upper sub-telemetry system, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter, wherein the signal is communicated between the multiple positions in the wellbore at a rate of at least about 1,000 bps.

33. (Currently Amended) The system of Claim 1A combined telemetry system for communicating a signal between multiple positions in a wellbore comprising:

a lower sub-telemetry system, the lower sub-telemetry system coupled at one end to a sensor; and

an upper sub-telemetry system, the upper sub-telemetry system coupled at one end to another end of the lower sub-telemetry system and coupled at another end to at least one of a signal receiver and a signal transmitter, wherein at least one of the lower sub-telemetry system and the upper sub-telemetry system comprises a coupling system, the coupling system comprising:

a first ring coupled with a first transmission wire; and

a second ring coupled with a second transmission wire.

34. (Previously Presented) The system of Claim 33, wherein at least one of the first transmission wire and the second transmission wire is provided in the form of a hard wire in hard wire drill pipe having a tubular passage there through.

35. (Previously Presented) The system of Claim 34, wherein the first ring and the first transmission wire are positioned at least partially within the tubular passage of one of the drill pipe sections and the second ring and the second transmission wire are positioned at least partially within the tubular passage of another one of the drill pipe sections, the position of the first ring being sufficiently close in proximity to the position of the second ring to transmit an electric signal through at least one of inductive coupling and capacitive coupling.

36. (Previously Presented) The system of Claim 35, wherein the electric signal comprises at least one of data and power.

37. (Previously Presented) The system of Claim 34, wherein the first transmission wire and the second transmission wire are each attached to an internal surface of the tubular passage for a respective drill pipe section.

38. (Previously Presented) The system of Claim 33, wherein the first ring is coupled to the first transmission wire by a releasable hard wire connector, and the second ring is coupled to the second transmission wire by a releasable hard wire connector.

39. (Previously Presented) The system of Claim 34, wherein the first ring is secured within the tubular passage of one of the drill pipe sections by a friction fit, and the second ring is secured within the tubular passage of another one of the drill pipe sections by a friction fit.

40. (Previously Presented) The system of Claim 33, wherein the first ring comprises a first tapered section and the second ring comprises a second tapered section, the first tapered section having a smaller outside diameter than an inside diameter of the second tapered section so that the first tapered section fits at least partially within the second tapered section.

41. (New) The system of Claim 33, wherein the one end of the lower sub-telemetry system defines a first axial position in the wellbore and the another end of the lower sub-telemetry system defines a second axial position in the wellbore, the signal being communicated between the first axial position and the second axial position.

42. (New) The system of Claim 41, wherein the one end of the upper sub-telemetry system defines a third axial position in the wellbore and the another end of the upper sub-telemetry system defines a fourth axial position in the wellbore, the signal being communicated between the first axial position, the second axial position, the third axial position and the fourth axial position.

43. (New) The system of Claim 33, wherein the lower sub-telemetry system is selected from a group comprising drill pipe, casing, mud, cable, hardware

drill pipe, hardwire casing or fiber optic cable, and the upper sub-telemetry is selected from a group comprising drill pipe, casing, mud, cable, hardwire drill pipe, hardwire casing or fiber optic cable.

44. (New) The system of Claim 33, wherein the sensor communicates the signal from at least one of the wellbore and the lower sub-telemetry system to at least one of the lower sub-telemetry system and at least one of a drill bit and a motor coupled to the sensor.

45. (New) The system of Claim 33, wherein the signal receiver receives the signal from at least one of the upper sub-telemetry system and the signal transmitter.

46. (New) The system of Claim 45, wherein the signal transmitter transmits the signal from at least one of a surface of the wellbore and the signal receiver to at least one of the surface of the wellbore and the signal receiver.

47. (New) The system of Claim 33, wherein the signal is communicated between the multiple positions in the wellbore at a rate of at least about 1,000 bps.

48. (New) The system of Claim 32, wherein the signal comprises at least one of data and power, the signal being selected from a group comprising acoustic, electric, electromagnetic or optic signals.

49. (New) The system of Claim 32, wherein the one end of the lower sub-telemetry system defines a first axial position in the wellbore and the another end of the lower sub-telemetry system defines a second axial position in the wellbore, the signal being communicated between the first axial position and the second axial position.

50. (New) The system of Claim 49, wherein the one end of the upper sub-telemetry system defines a third axial position in the wellbore and the another end of the upper sub-telemetry system defines a fourth axial position in the wellbore, the signal being communicated between the first axial position, the second axial position, the third axial position and the fourth axial position.

51. (New) The system of Claim 32, wherein the lower sub-telemetry system is selected from a group comprising drill pipe, casing, mud, cable, hardwire drill pipe, hardwire casing or fiber optic cable, and the upper sub-telemetry is selected from a group comprising drill pipe, casing, mud, cable, hardwire drill pipe, hardwire casing or fiber optic cable.

52. (New) The system of Claim 32, wherein the sensor communicates the signal from at least one of the wellbore and the lower sub-telemetry system to at least one of the lower sub-telemetry system and at least one of a drill bit and a motor coupled to the sensor.

53. (New) The system of Claim 32, wherein the signal receiver receives the signal from at least one of the upper sub-telemetry system and the signal transmitter.

54. (New) The system of Claim 52, wherein the signal transmitter transmits the signal from at least one of a surface of the wellbore and the signal receiver to at least one of the surface of the wellbore and the signal receiver.

55. (New) The system of Claim 3, wherein the signal is communicated between the multiple positions in the wellbore at a rate of at least about 1,000 bps.

56. (New) The system of Claim 18, wherein the converters convert one type of signal to another type of signal.